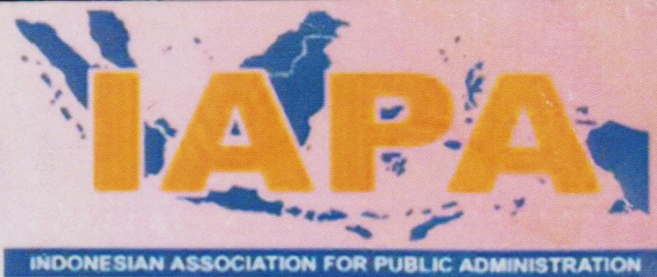


27-29  
September  
2015



# PROCEEDING

UNIMA IAPA INTERNATIONAL SEMINAR &  
ANNUAL CONFERENCE 2015

## “THE ROLE OF LOCAL GOVERNMENT IN GLOBAL COMPETITION”

(Peran Pemerintah Daerah dalam Persaingan Global)

Editor:

Recky H. E. Sendouw

Samrit Yossomsakdi

James Cullin

PUBLIC ADMINISTRATION STUDY PROGRAM  
FACULTY OF SOCIAL SCIENCE  
UNIVERSITY OF MANADO  
2015





# **“PERAN PEMERINTAH DAERAH DALAM PERSAINGAN GLOBAL”**

© Penulis

Reviewer:  
Eko Prasajo  
Sisca B. Kairupan  
Maryheather White

Perancang Sampul:  
Jesica Karouw

Penata Letak:  
Jeane Mantiri

Diterbitkan atas kerjasama:

**Program Studi Ilmu Administrasi Negara FIS UNIMA dan Indonesian  
Association For Public Administration (IAPA)**

**ISBN 978-602-73770-0-4**

Undang-undang Republik Indonesia Nomor 19 Tahun 2002 tentang Hak Cipta

**Tentang Hak Cipta**

**Pasal 2 :**

1. Hak Cipta merupakan hak eksklusif bagi Pencipta atau Pemegang Hak Cipta untuk mengumumkan atau memperbanyak ciptaannya, yang timbul secara otomatis setelah suatu ciptaan dilahirkan tanpa mengurangi pembatasan menurut peraturan perundangundangan yang berlaku.

**Sanksi Pidana**

**Pasal 72 :**

1. Barangsiapa dengan sengaja atau tanpa hak melakukan perbuatan sebagaimana dimaksud dalam Pasal 2 ayat (1) atau Pasal 49 ayat (1) dan ayat (2) dipidana dengan pidana penjara masing-masing paling singkat 1 (satu) bulan dan/atau denda paling sedikit Rp 1.000.000,00 (satu juta rupiah), atau pidana penjara paling lama 7 (tujuh) tahun dan/atau denda paling banyak Rp 5.000.000.000,00 (lima milyar rupiah).

Barangsiapa dengan sengaja menyiarkan, memamerkan, mengedarkan, atau menjual kepada umum suatu Ciptaan atau barang hasil pelanggaran Hak Cipta atau Hak Terkait sebagaimana dimaksud pada ayat (1) dipidana dengan pidana penjara paling lama 5 tahun dan/atau denda paling banyak Rp 500.000.000,00 (lima ratus juta rupiah).

## TABLE OF CONTENT

Preface.....

Table Of Content.....

Better City, Better Local Competitiveness? City Branding and Marketing Toward  
Economic Development (Case Study: Binjai City, North Sumatera, Indonesia).

*Septiana Dwiputrianti* .....

Green Skills for the Transition to a Low-Carbon Economy in Indonesia.

*Oliver Ortis* .....

Develop Self-Reliance Of Village Government Based On Management Of Community  
Land.

*Rozidateno Putri Hanida, Bimbi Irawan, Syamsurizaldi* .....

Land Service Innovation (Intan) Land Office In District Pemalang.

*Sri Suwitri* .....

Surabaya Single Window As Pilot Project Of Virtual Integrated Services Unit.

*Eva Hany Fanida, Fitrotun Niswah* .....

The Implementation Of Regulations Mayormo. 3/2012 In South Tangerang City (A Study  
Of The Management Operating Time For Heavy Goods Vehicles In The Area Of South  
Tangerang).

*Evi Satispi dan Hermansyah* .....

Lapemas (Community Services Agency) As Effectiveness Model Of Rayon In



Thailimalaya City <i>Bandung Sudaryana</i> .....	85
Strategies To Reduce The Urbanization While Improving The Quality Of Human Resources In The Hinterland In Order To Develop Local Competitiveness at Batam City. <i>Mari Enita Puspita Sari</i> .....	90
System Development Policy Formulation Approach Through Food Self Sufficiency Of Local Government Bureaucracy In Sidenreng Rappang Regency. <i>Amrullah Ahmadi</i> .....	101
The Analysis Of Street Vendors Compliance Towards The Implementation Of Bandung Regional Regulation No. 04/2011 About Management and Development Of Street Vendors in the Red Zone. <i>Sumardi Smanjuntak &amp; Kristian W. Wicaksono</i> .....	112
Policy Formulation And Exploitation Of Coal Mine (Deliberative Policy Analysis Of Community Based Local Dayak Meratus In Banjar Regency Of South Kalimantan). <i>Supriat Rahayu</i> .....	121
The Policy Of Ecotourism Development In Mempura. <i>Almarizal Hasna, Hernimawati, Prihati</i> .....	140
Developing Local Competitiveness of Telematics/ ICT Industry (Case study in Bandung and Cirebon). <i>De Marlina, Rifiaty Safariah, Andri Heryandi</i> .....	150
Innovative Public Health Through <i>Sutera Emas</i> Program To Realize Health Security. <i>Desi Nuraini Choiriyah</i> .....	161
Impact Of Corporate Social Responsibility Program At Badan Penyelenggara Jaminan	

Sosial Kesehatan Main Branch Office Of Surabaya. <i>Indah Prabawati and Meirinawati</i> .....	181
Analysis Of Service Quality On Building Permit In Depok City The Province Of West Java, 2014. <i>Retnowati WD Tuti, Lilyk Sumarni</i> .....	193
Public High School Students' Socio-Economic Status And Attitude Toward Learning <i>Daniel C. Kambey</i> .....	205
The Influence Of Incentive To Performance Employees In The South Tangerang City (Tangsel). <i>Haniah Hanafie</i> .....	212
Society Perception On Kalteng Harati Program In Katingan Hilir Central Kalimantan. <i>Bonaventura Ngarawula</i> .....	224
"Passive Secularism": Comparing State-Religion Relations in Indonesia and the United States. <i>Erica M. Larson</i> .....	233
Local Government Administrative Capacity To Implement Land Banking In Bandung City. <i>Sintaningrum, Santi Permasih</i> .....	247



# INNOVATIVE PUBLIC HEALTH THROUGH *SUTERA EMAS* PROGRAM TO REALIZE HEALTH SECURITY

Ilmi Usrotin Choiriyah

Faculty of Politic and Social Sciences

University of Muhammadiyah Sidoarjo, Indonesia

Tel: +62-857-5530-7555

E-mail: [ilmi.usrotinchoiriyah@gmail.com](mailto:ilmi.usrotinchoiriyah@gmail.com)

**Abstract:** Qualified human resources are one of the main components that should be owned by the local and central government in the face of Global Competition. The availability of qualified human resources should be balanced with adequate health resilience through the provision of quality health service. This becomes a serious concern of the Malang Regency government in developing innovative public health. It is implemented by Integrated Epidemiologic Surveillance Based on Community (*sutera emas*) program. This program become a national pilot project that to be adopted by Ministry of Health. This program is a system of detection and early warning of disease potentially outbreaks in increasing maternal and child mortality. The program aims to empower communities both as objects and subjects of surveillance that is able to utilize information technology such as cell phones and gateway short message software as media reporting which can analyze the necessary data automatically, 24 working hours nonstop and anytime). This research is conducted in Kepanjen Health Centre, Malang Regency that is using descriptive research with qualitative approach. The result of this research shows health service through *Sutera emas* program is running well to press the level of maternal mortality, born baby, child; community nutrition problems; and infectious diseases in realizing health security.

**Keywords:** Social Sciences

**Keywords:** innovative public health, *sutera emas* program, health security

## INTRODUCTION

Health is one of the basic human needs be an investment to support the development of national economy and it has an important role in efforts to overcome the poverty. The development of health with the human investment in improving the quality of human resources. The quality of human



resources will affect to the governance in realizing the vision and mission that has been set for the society welfare.

Both nationally and internationally, health issues have become one of the priorities/focus to overcome optimally. It is caused health to be one of the most urgent factors in sustaining human life. In international scope, the global community has one serious attention to the health problems through MDG's 2015 program implementation. The MDG's encapsulated eight globally agreed goals in the areas of poverty alleviation, education, gender equality and empowerment of women, child and maternal health, environmental sustainability, reducing HIV/AIDS and communicable diseases, and building a global partnership for development. And then, there is sustainable program to replace the millennium development goals once they expire at the end of 2015. It is called sustainable development goals (SDG's). SDS's are a proposed set of targets (17 proposed goals) relating to future international development. The key outcome of MDG's is that of securing political commitment to sustainable development. One of the proposed goals in SDG's is ensure healthy lives and promote well-being for all at all ages. Thus, based on both international scale program described above, Indonesia also give serious attention to the health issues that have the most urgent role in human survival.

The needs fulfillment of the community on the health aspects cannot be separated from the function of providing health services. Service is one aspect of national life which plays an important role in the society welfare. Government has the obligation to provide public services in order to meet the needs of the community in whole aspects that suitable with the rule of law. However, in reality the poor provision of public services has not been able to give satisfaction to the public. Various complaints and criticism message are voiced many people to government in providing service that is relating with services conditions to the public both at the central and regional levels.

Therefore, the improvement and enhancement of the quality of public services must be done by government. It can be implemented through the innovation programs of public service. This innovation is the renewal of the various activities of the services to the community in order to meet society to the fullest satisfaction. The community needs are met optimally will have an impact on human security in realizing human security that is people-centered. Its focus shifts to protecting individuals. Human security not only protects, but also empowers people and societies as a means of security. Human security consists of seven aspects which are: economic security, health security, food security, environmental security, personal community, community security, and political security

Based on the explanation above, the one aspect of human security is health security which has an important role in human survival. It is caused realization of health security will affect to the quality of human resources in positioning central or local government. Qualified human resources become one determinant of success or failure of the leadership of a government (internal side) and also the position of a country in facing global competition (external side). Thus, the availability of qualified human resources will be affect to the qualified health services.



In the process of health services, the treatment for various health problems is carried out through surveillance activities. Surveillance is an activity that is systematic and continuous data collection, processing, analysis, interpretation and dissemination. So, it can be seen the appropriate action to overcome the problems existing health quickly and accurately. In the reality, the increase cases in each year and frequent delays in the detection of early case finding become one of the obstacles in excellent service to the community, especially in the health aspect. The similar problems also occur in Malang Regency, especially in Kepanjen health centre. Based on the interview with Mr. Sri Lesmono Hadi as head of administration in Kepanjen health centre stated that, in June 2005 there have been cases of mass poisoning in Kepanjen about 214 people. But Kepanjen health centre got this information late. It is caused; the case is occurred at 15:00 p.m. And the position of medical officers who have gone home and did not stand by in the health centre. In addition, the local community did not seek treatment at Kepanjen health centre until the next day. So that, the information related to the case was received by one of the officers from local residents when they met in the street at the next day at 17.00 pm. So, from this case, the medical officers have created innovations in providing health services fast, effective, efficient and accordance with minimum service standards (<24 hours).

The form of an answer to collect data fast by optimizing the process of community empowerment has created and initiated by the Kepanjen health centres through *sutera emas* program (integrated epidemiologic surveillance based on community). The program has been implemented since 2009 and became the first community-based surveillance program in Indonesia. *Sutera emas* program was a detection system and early warning of epidemic disease and threatened maternal and child mortality. The program aimed to optimize the role of community empowerment as object and subject of surveillance (cadres trained in *sutera emas*) in the smallest area, namely the scope of the neighborhood (RT) as a starting point for information resources and medical officers that is scattered in the whole of village and health care unit. It was equipped with the tools such as mobile phones as media reporting and software that is able to analyze the necessary data automatically that could work until 24 hours nonstop (Pocket book *sutera emas*: 2012).

The *sutera emas* program became pilot project of national health that was adopted by ministry of health. One award is given to Kepanjen health centre be regions with innovative breakthrough health services in the autonomy award 2013 from java pos institute of pro-autonomy (JPIP) and became national pilot health centres in the surveillance based on community. Then, *sutera emas* program was introduced nationally in exhibition millennium development goals (MDG's) award in Jakarta and became the basis program to support extending maternal and neonatal survival (EMAS) which is a partnership program between the health minister of republic Indonesia and united states agency for international development (USAID). (<http://igi.fisipol.ugm.ac.id/index.php/id/unfgi/kabar-suterasi/399>). Based on the explanation above, the researchers are interested in doing research related to how the *sutera emas* program procedures in the Kepanjen health centre, Malang Regency and how can *sutera emas* program to realize health security in the Kepanjen health centre, Malang Regency.



## INTEGRATED EPIDEMIOLOGIC SURVEILLANCE BASED ON COMMUNITY (*SUTERA EMAS*) PROGRAM

Integrated Epidemiologic Surveillance Based on Community (*Sutera emas*) program

*Sutera emas* program was one of the health services innovations that were implemented in the Kepanjen health centre since 2009. Philosophy of *sutera emas* program include: early case finding, early case reporting, early case handling, and community empowerment. Based on the interview with Mr. Sri Lesmono Hadi as the head of administration in Kepanjen health centre told that the history of the appearance of *sutera emas* program have started since 2004. Initially before using modern technology, a *sutera emas* program was done manually. Medical officers in the Kepanjen health centre in their daily activity asked to perform daily census could potentially epidemic of infectious disease. "They were looking for all the diseases that was suffered by the public starting at 12:00 to 1:00 p.m and then they reported by telephone. Then at 1:00 p.m. to 2:00 p.m. we did analysis, if the conditions were safe and there were no dangerous disease, we would go home," said Sri Lesmono Hadi. Until the mid-2005 in June, the case of mass food poisoning as much as 214 people in Kepanjen health centre. But medical officers were late in knowing this information. It was caused people did not take treatment at Kepanjen health centre and the officers did not get the information related to the case when the food poisoning occurred. Actually, officers just known that five people who treatment in Kepanjen health centre because they food poisoning. Then, in the evening, one of the officers got the information that 209 people also food poisoning. And finally fast moving team immediately went to the location where food poisoning occurs. The cause of the food poisoning is because there is a citizen who held an event *slamatan* to his parents who had died but they miscalculated to cook food that is served at the invitation, so the food is already stale and contain bacteria that cause diarrheal disease in the local community. Based on the incident, arising the impression that local health officials slowly in the process of handling cases of disease outbreaks in the community because they were late in getting such information. Whereas, the community should have the right to get minimum service standard in the case of the extraordinary handling < 24 hours.

So, in the above case is predicated on health workers together to think hard to do a change in delivering better health services to the community. They sparked a creative idea in order to provide a rapid health and handling on target through the means of information technology. They designed a concept of providing desktop software that is used as a means of health services in achieving the target of SPM. However, in the process of providing this facility has been hampered by considerable funds. Furthermore, health workers have an idea to propose Kepanjen proposal funding the provision of the means of this desktop to the Government of East Java province. And in the end of 2009, the provision of these facilities got the approval from the provincial government that gets funding from the rest of the province's annual budget of 100 million. This desktop software initially can only be enabled by Kepanjen Health centre as a facilitator that works automatically and can be accessed at



any time. The availability of this software became a forerunner in the naming of the *Sutera emas* programs in Kepanjen Health centre. The concept of the *Sutera emas* programs work by using the software and the manual are very different. If manual, medical personnel must be Kepanjen health centre himself down into the region. However after the automated, utilizing personnel cadres of integrated service post (health) (*posyandu*). In the process these *sutera emas* program management has taken over the hapless regency government under the authority of the health agency in Malang Regency.

Up the idea in developing the *Sutera emas*, Dr. Hadi Puspita was awarded the 2007 National role model as a doctor and the doctor is commendable. *Sutera emas*'s own program later adopted by the Ministry of health of Indonesia as a national health programs and health centre Kepanjen crowned as the national pilot health centre in the field of community-based surveillance. Next *Sutera emas* was introduced nationally in the Exhibition three Millennium Development Goals (MDG's) Award in Jakarta and become a basic program to support Extending the Maternal And neonatal Survival (EMAS) which is a program of cooperation between the Ministries of health of the Republic of Indonesia with USAID. In addition, *Sutera emas* also became an innovative health programs adopted by the health Agency in Malang Regency then applied at other health centre as part of a Grand Strategy health services Malang in 2011-2015.

In addition, in its development program implementation this *sutera emas* also received support from the Government of Australia. This is affected by the Government of Australia that supports the efforts of the Government of Indonesia to strengthen the implementation of the policy of decentralization in Indonesia, mainly through the program Australia Indonesia Partnership for Decentralization (AIPD). AIPD program aims to encourage the improvement of public services particularly in health and education through the regional financial management and gender responsive. Since implementing the law on public information disclosure no. 14 of 2008, public awareness will be the right to obtain information about public services is getting big so bring consequences on public service governance improvements in service units, including in the field of health. *Sutera emas* is one of intervention programs to support public access AIPD against public information electronic government to facilitate the community. In addition, as well as supporters of the system of short message-based surveillance applications are implemented in the clinic. Given the health problem is still a major issue in development, then the main focus of getting more information a variety of health problems often encountered and found in health centres, especially in Malang Regency.

Through *sutera emas* program, local government will empower community in health development. With the rise of information and knowledge on the community in the field of health, then it is expected to foster the participation and control of the community against the service provided by the unit of services (in particular public health). Quality good service can push the "demand" to obtain health services, which in turn can improve access to health services to the whole



community. Cooperation between Government of Malang Regency with AIPD in *sutera emas* program begins in 2014. AIPD provides assistance funds for the provision of web-based software that is under the Coordinator of health services by the developing County. So this website can be accessed by all health centres that already implement this *sutera emas* program. Up to the year 2015, only three health centre that have been ready to implements the program. They are the Kepanjen health centre, Sumber Pucung health centre, and Turen health centre. So far, the implementation of *Sutera emas* program of is still implemented in Kepanjen health centre, Malang Regency becomes one of the pilot project adopted by the Ministry of health.

The purposes of *sutera emas* program which are:

1. The early warning system.
2. Decreasing maternal mortality rate and neonatal mortality rate.
3. Improving the health level of maternal, neonatal, and toddlers.
4. Improving case detection rate.
5. Handling early emergency cases.
6. Detecting of risk factors on the community.
7. Detecting of women reproductive couples that high risk.
8. Empowering communities in the development of health.
9. Promoting of the health community through a web-based.

#### Surveillance

Surveillance is a systematic activity and continuous data collection, processing, analysis, and interpretation. So it can be known how to be appropriate action in tackling health problems that exist in a quick and precise. The function of this surveillance is to identify problems and their risk factors and its determinant factors, so that it can be the basis of decision making in addressing existing health problems effectively and efficiently. In some surveillance activities are viewed as still get-together gathering only. While the activities of processing, analyzing and interpreting is still a bit of a do. This has resulted in frequent delays in the detection of cases as well as information on the radar early genesis of the emergency case in the field.

The effort of lowering maternal mortality and neonatal mortality rates are still high, has attempted through surveillance activities integrated cross-program as well as cross-cutting, so that efforts are being made to the extent the handling of pregnant women, mothers, maternity and childbirth. Yet appropriately handle candidate pregnant women at high risk early on, before pregnancy occurs, whereas approximately 80% of the causes of maternal deaths due to congenital disease. Many of the obstacles in the implementation of the overall surveillance, among other things:

1. Limiting of input data to be analyzed.
2. Limiting of human resources as analyzer data.
3. Requiring a lot of time and accuracy.



The existence of this surveillance has benefits for communities, which are:

1. Detecting of acute changes of the disease and its distribution.
2. Identifying and calculation of trends and patterns of disease.
3. Identifying of high-risk groups in according with the time, people, and places.
4. Identifying of the risk factors and other cause.
5. Detecting of health services changes that occur.
6. Monitoring tendencies of endemic disease.
7. Studying the natural history of the diseases and its epidemiology.
8. Providing information and basic data for the projected the needs of health services in the future.
9. Helping establish priority health problems and priority objectives of the program at the planning stage.

The focus activities of the surveillance in the *sutera emas* program include:

1. The case of a potentially infectious disease/ epidemics (Emergency cases).
2. The case of midwife to reduce maternal mortality and neonatal mortality through:
  - a. The early detecting of high risk obstetrics cases.
  - b. Detecting of women from reproductive couples who have dangerous diseases in their pregnancy and are not using contraceptives to prevent pregnancy high risk.
3. Malnutrition case and protein-energy malnutrition.

### ***Sutera emas* Cadre**

Surveillance activities carried out by the above, not only comes from local medical officers, but through the course of this *sutera emas* has emerged a creative idea in empowering the community in detecting the disease early. Such surveillance is known as the *Sutera emas* cadres. They are a people or group of people who become an agency management in an organization, which functions in helping the duties and functions of the geof. The duties and functions of these cadres, is monitoring citizens suffering from the disease. Then the cadre told a nurse or midwife there is village in Village health post. Cadre explains diagnosis disease nurse or midwife to citizens with the skills already taught. Next after receiving the report, midwife or nurse then went to the citizens. Then after being diagnosed with the ailment, a midwife or nurse it will send a message to the server (the software). If the disease is transmitted it never happened, then layer on the server computer will instantly appear reports of the emergency case.

It is some observations will be carried out by cadres in the surveillance activities on infectious diseases, namely:

1. The type of disease is suffered by the community.
2. Identifying of the disease through the characteristics / sign of symptoms.
3. The method of transmission of disease.
4. The simple act and disease prevention.



5. Reporting and follow-up in handling of emergency case.

While the observations in relating to the maternal and neonatal health will be done by cadres, among others:

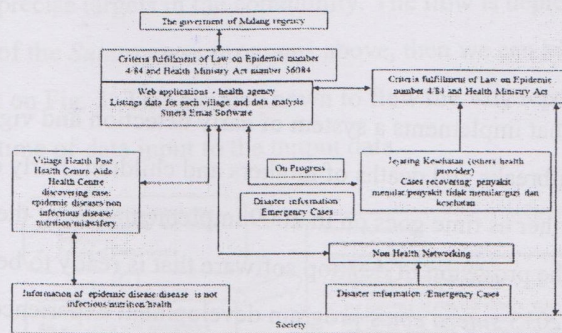
1. Women of childbearing age at high risk: potential people who are married and pregnant.
2. Pregnancy and signs of childbirth.
3. Post-birth and lochia.
4. The neonatal condition like birth weight less than 2.5 kg.
5. Malnutrition toddlers, etc.

*Sutera emas* cadre has a major function in achieving the success or failure of this program implementation. This is because the cadre is the first informant related to the emergency case in the field. Thus, the cadre has an important role in supporting the success of this program. The role of cadre in surveillance of disease and health problems, are:

1. Looking the emergency case that occurred on areas respectively.
2. Hearing the emergency case from the neighbors in their neighborhood.
3. Writing the emergency case that occurred at the site.
4. Finding the symptoms and health problems can be obtained from:
  - a. Integrated service post (health)
  - b. Report from communities
  - c. Family Welfare Movement
  - d. Cooperation with school health
  - e. Home visits
  - f. Studying activities, social gathering, youth organization
  - g. Traditional treatment places.
5. Reporting of emergency case to the village midwife or nurse that is associated with completeness some data are names, age, sex, occupation, address, symptoms and signs of disease or things that are threatening health problems, and action/first aid has been performed as well as.
6. Preventing and simple treatments in order to the diseases can be handled early and do not spread to other communities.

Surveillance activities that are conducted by a cadre become core of implementation *sutera emas* program. It is caused cadre will identify the health cases quickly, on targeted, and easily in realizing minimum service standards < 24 hours and improving the quality of health services. At the beginning stage of *sutera emas* program implementation is spread one cadre in each one village. However, in reality the function of cadres didn't running optimally. It's caused; the scope of the area should be observed by cadres is too broad. Thus, it changed to each representative cadre namely one community groups one





cadre. However, it was still not maximal in this program implementation because the regional coverage is still widespread. In the end, it was decided that representatives of one cadre one neighborhood organization. In fact, it can be done optimally and effectively. It is caused a cadre can access its area. Thus, the existence of a *sutera emas* cadre has an important role in this program implementation.

#### 2.4. Health Security

Health Security aims to guarantee a minimum protection from diseases and unhealthy lifestyles. In developing countries, the major causes of death traditionally were infectious and parasitic diseases, whereas in industrialized countries, the major killers were diseases of the circulatory system. Today, lifestyle-related chronic diseases are leading killers worldwide, with 80 percent of deaths from chronic diseases occurring in low- and middle-income countries. According to the United Nations, in both developing and industrial countries, threats to health security are usually greater for poor people in rural areas, particularly children. This is due to malnutrition and insufficient access to health services, clean water and other basic necessities (Wikipedia). Indicators of health security dividing in three indicators, namely impact, outcome and output indicators (National Development Planning Agency (2012) quoted from Kusuma, (2014)). Health security entails the protection against illness, disability, and avoidable death. Health security is more than just a physical being or not just the absence of disease, but as a completely physical, mental, and social well-being (Commission on Human Security (2006)).

From some explanation about, the researcher collected the data research through descriptive type with qualitative approach. Data was collected through interviews several informant who have related to the topic research, observation, and documentation. While the source of data are acquired through primary data (interviews to informants) and secondary data as supporting data collection, namely the documents that is relevant to the *sutera emas* program, government regulations, and other government policy documents.



## RESULTS AND DISCUSSION

### Mechanism of *Sutera emas* Program

*Sutera emas* program is a program that implements a system of early detection and vigilance of the disease are potentially threatening outbreaks and deaths of mothers and children. Early creative ideas this program emerged in 2004. Further as time goes on in 2009 implementation of the new program is ready to be carried out with the provision of desktop software that is ready to be operated by the health centre Kepanjen. Later, in 2013 *sutera emas* program development experience on the use of these software systems that are no longer accessible only at kepanjen health centre, however this software system was changed to web-based software integrates data input from any sources. Web-based software has a function to monitor data input to output the data reported at three health centre in Malang (in 2009 to 2015). So, in web-based software makes it easy for each stakeholder involved in *sutera emas* program.

The following is a mechanism or procedure in a system deployment is run in *sutera emas*. Fig. 1. This shows about edipemiology surveillance system in *sutera emas* program.

Fig. 1. Edipemiology Surveillance System in *Sutera Emas* Program

Fig. 1. the above shows that the surveillance system epidemiology of *sutera emas* malang is under Government's coordinator of malang. Further types of disease outbreaks can be detected according to the plague and Minstry of Health act that will be analysed through *sutera emas* software application. Handling reports against this incredible incident information will be monitored by health centre and others health providers working together in handling the case. Further related information early detection of unusual in a society can be identified from the outset through cadres at each at each village. While working on the concept of the *Sutera emas* program are reflected in Fig. 2. that indicates that the program is not running or the *sutera emas* lies in the function of the cadres. It is because in the early stages there are cadres of *sutera emas* functions as an informant on the discovery of the case. Then that information will be integrated on some informants as a program coordinator to

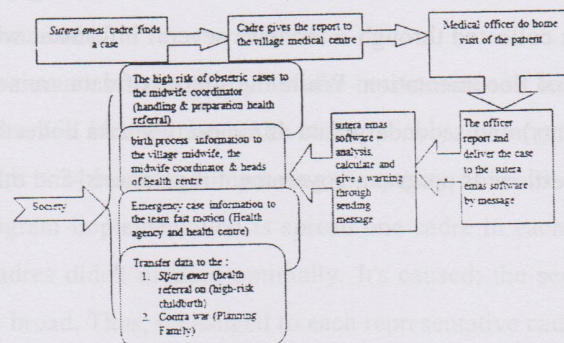


Fig. 2. Working Draft of *Sutera Emas* Program



take action quick and precise targets in the community. The flow is depicted in Fig. 2. is following:  
Based on the concept of the *Sutera emas* programs above, then we can know the technical stuff that is done in the field. Next on Fig. 3. This can be known to flow the way reporting is done by kepanjen medical officer at the time of data input to the output data.

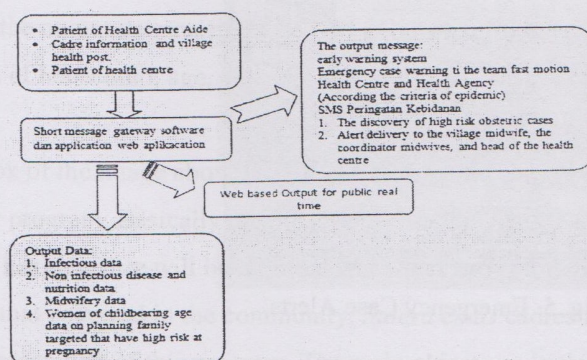


Fig. 3. Reporting Process in *Sutera Emas* Program

Fig. 3. the above shows that the flow of how the reporting done by health workers through this *sutera emas* software applications included several stages:

First, the information of the patients who contracted the disease had been accepted by health workers through the short message gateway software and web applications. Second, the output of the short message is information that describes the various happenings in the field. Third, the officer doing the analyzing software on data related to the classification of types of diseases that occur in the field and the fourth report of the results of each such health officer can be seen on the web of Health Agency Malang Regency that is monitored at any time.

Based on the explanation of the concept of a work in its entirety in this *sutera emas* programme, the results of the observation and analysis of researchers can be shown some of the software programs that are available in the web-based *sutera emas*. The first step that is used as a liaison in the implementation of this programme is a communication medium that is a cell phone. Next steps report when there are unusual in the field then it will perform reports on *sutera emas* web software in kepanjen Health centre as follows:

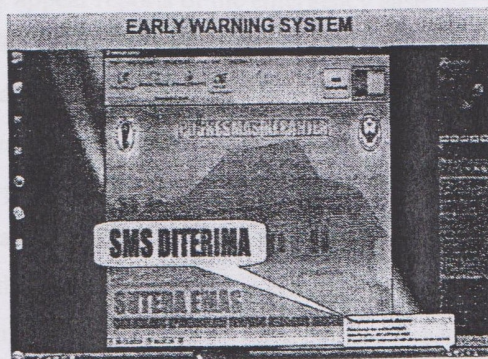


Fig. 4. Early Warning System



On the incoming short message notifications on the server as seen above, the next display will appear as follows:



Fig. 5. Emergency Case Alerts

On view Fig. 5. The above shows that there is emergency case alert at a specific location next the message will be integrated on the team fast motion for immediate handling is done at a specific location. The display is as shown in Fig. 6. And the officer should do analyze related specific emergency case data on detail e incident which is happened on the field and will see the results of the data reporting is indicated in Fig. 7.

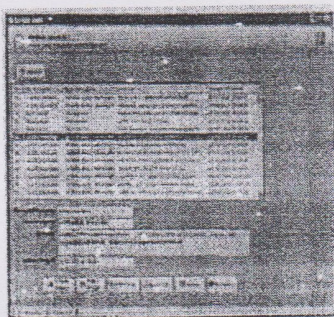


Fig. 6. Short message from emergency case alerts

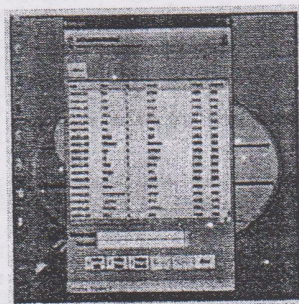


Fig. 7. List of Patient Diseases

After doing data input and then it is processed by the system software, so medical officers can see the output data as a report to stakeholders as a monitoring on the implementation of the program of the *Sutera emas*. The data output can be shown as Fig. 8. and Fig. 9 as follows :

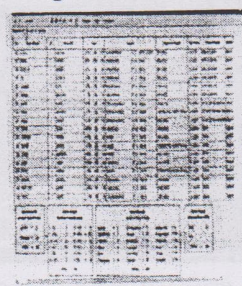
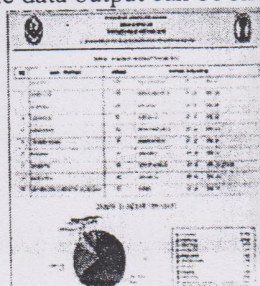


Fig. 8. & 9. Data Output in *Sutera Emas* Program



Fig. 8. above is the output data from the data report is conducted by health workers to detect some diseases which had been detected early through a *sutera emas* program. Based on these data it can be known that in 2011 there are 10 types of disease detected by health workers who occupied the first rank is influenza, diarrhea, varicella, until the lowest ranking was the disease dematitis contacta allergia. In addition, the output data on fig. 9. related to list of sufferers report data consisting of names, name of head of household, age, address, diagnosis date, suspek receive messages, the sender's name, and the status.

Based on the look of the image above, the display shows the data input to output data on web software *sutera emas* program. Basically the process of data input to the output data is carried out by officers of the health health centre will be reported when they are getting information related the extraordinary events that occurred in the community. *Sutera emas* cadres function is as a source of the informant first implementation of this program. The main objectives in this program implementation are whole society experiencing emergency case of low, medium, and high.

The determination of the criteria of this *sutera emas* cadres are the ones that matter to others. This is due to the attitude of concern to other people is the basis of success in the implementation of this program. Concern for others who contracted the unusual will be detected early and get the handling quick and right on target. Most of the *sutera emas* cadres in kepanjen Health centre this is the mother-housewives and mothers of retirees who have the concern to the surrounding community. The total number of Cadres in Malang Regency up to year 2015 amounted to 1,500 people spread over 3 health centre include Kepanjen, Turen, and Sumber Pucung. Where in each neighborhood units, at least one *Sutera emas* cadres who have been trained.

In Kepanjen Subdistrict, spread 545 cadre average is mothers. The duties and functions of these cadres, is monitor citizens suffering from the disease. Then the cadre told a nurse or midwife there is village in *Village health post* (Helath Village Post). Cadre explains diagnosis disease nurse or midwife to citizens with the skills already taught. Next after receiving the report, midwife or nurse then went to the community. Then after being diagnosed with the ailment, a midwife or nurse it will send a message to the server (the software). If the disease is transmitted it never happened, then layer on the server computer will instantly appear reports of the emergency case.

So far, the training has been given to the *sutera emas* cadre was performed on each month at a meeting with cadres of integrated service post (health). The health workers also provide counseling or socialization to this *sutera emas*. However, for specific training programs associated with *sutera emas* detection of many diseases is performed approximately twice on September 8, 2008 and August 14, 2015. On September 8, 2008 a training cadre is only done on a *sutera emas* cadre's kepanjen health centre which was then being the only health centre that implemented the program. However, in its development by 2015, there are two other health centres that are already starting to implement this program. It is supported by the existence of a partnership between the Government of Malang by AIPD in order to improve the quality of public service-based e-government.



It can not be denied, that in the provision of application software requires large expenses so necessary holding of cooperation with outside parties as a facilitator. One form of cooperation in the financing of the Fund is the creation of web applications and the Fund's training 1500 cadres. Cadre training conducted in August 2015, this is done Institute of Health Science in Kepanjen, Malang Regency is divided into ten large classes. The cadres are given training and surveillance Handbook as a basis in identifying unusual disease.

Based on the results of the interview with Anik Arimbi mother as one of the cadres in Ardirejo Village, explained that the results of the training teaches us to identify the symptoms of the disease in accordance with the manual. She became cadre with *sutera emas*, because she was a retired Department of forestry and as long as she was alive, she wants to devote my life for the sake of the benefits of living together. She was the type who loves freedom and care for the environment around me. So, she decided to become a cadre with *sutera emas*. At that time, there was an emergency case relating to pregnant women at high risk. That is because the mother is suffering from high blood disease so that during this pregnancy pregnant women have a high risk of childbirth. She is a *sutera emas* cadres had accompanied her since the pregnancy in the semester I-III. At the time of the pregnancy the mother had already entered a period of labor, then she rushed to coordinate with each other pregnant mothers and midwives village to prepare for the planned health referral at the time of birth. She immediately give information related data reporting form according to Mrs. Nastiti to prepare for the planned health referral that is the first step she reported to the village midwife. Connect the Mrs.'s statement as a village midwife nastiti stated that to follow up on the pregnant, she reported via message to Kepanjen Health centre to provide health referral to the local Kanjuruhan hospital. Next, she got a reply report as warning against labor which should be available on estimates that have been determined by medical personnel. In addition, she has also been preparing the means of transport provided by the village to standby when the time of delivery to the Kanjuruhan hospital. Like that, the program is run. We were with the community is attempting to do early detection in order to save the maternal and child health while experiencing labor especially in pregnant women at high risk.

In addition, cadre 07 neighborhood i.e. Mrs. Endah stated that willingness being backed by *sutera emas* cadres because her everyday as a housewife so she wanted to find a flurry of other tentuya are also useful for other communities. Acknowledged Mrs. Endah as a housewife, and she was bored at home alone and looking for activities in the community that will benefit many people. One emergency case that ever happened in my area is a disease of dengue fever. There are three people who have contracted the disease in turn. So the next step she report to the Mrs. Nastiti as village midwife. Then Mrs. Nastiti visited our village to detect outbreaks of the truth. And in conclusion it is true that our area contracted the plague. Then the hose a few days after the incident of kepanjen medical officers do voggng in our area to prevent outbreaks of dengue fever spread on members of the public or other areas. The existence of this program, Mrs. Endah felt that security



against the public health. It is because the Ministry of health has provided a response, fast and also responsiveness to the extraordinary incident prevention, such as dengue fever.

Some of the identification of the types of diseases that obtained at the time of the *Sutera emas* cadre training include: measles, *chikungunya*, dengue fever, diarrhoea, diphtheria, filariasis (elephant's foot), bird flu, hepatitis, herpes, HIV, leprosy, leptospirosis, malaria, meningitis, vomiting, pneumonia, polio, rabies, inflammations of the eye, skin diseases, Lung tuberculosis, typhoid, varicella (chicken pox). Some of the determination of the type of disease, have been considering from disease that gives a great effect and impact for the disruption of the public health and requires special handling and fast. Early detection is done by this cadre will they match with the results of the manual and training they have. Although the initial identification is done by cadres is not necessarily true according to the local health/medical personnel. However, it would not be a big problem. It is because medical personnel already feel next drummer with the giving of the information they provide.

Furthermore, the local village midwife will soon come to the scene of incredible follow-up to detect outbreaks that occur. So, it will be able to minimize mortality and provide early handling to the community. In addition, the program is also a *sutera emas*'s efforts in empowering the community to improve the quality of health services. So, the community became a partner for local Governments especially in kepanjen Health centre provides health services in accordance with the minimum service standard.

### **Implementation of *Sutera emas* Program in Realizing Health Security**

This is the *sutera emas* programs innovation programs in the health field that was conceived by kepanjen health centre, Malang Regency. Based on the results of research and observations of the researchers, stated that this program is the embodiment of innovation on health security. Health security is one of the most important aspects and has a very urgent role in human existence. Up to now, internationally as well as national health security has become part of the most important issue getting special attention from various circles of society.

Health Security aims to guarantee a minimum of protection from diseases and unhealthy lifestyles. This is due to malnutrition and insufficient access to health services, clean water and other basic necessities (Wikipedia). Based on the statement above, innovation of *sutera emas* program can be analyzed that the realization of health security in this program aims to provide security against the prevention of disease outbreaks early and unhealthy lifestyle. That is because the early prevention against disease outbreaks can be minimized by the existence of surveillance namely the cadres will always standby to observe and monitor unusual, infectious diseases, monitoring maternal and child health, nutritional adequacy, etc.

*Sutera emas* cadre comes from the environmental community that has a concern for the problems that occurred in the vicinity especially health problems. This cadre has initially received training and



provision of knowledge associated with those types of diseases in the community and fast responsive in handling of respective cadres. This has the purpose to minimize mortality and the spread of the emergency case to a wider area again.

The discovery case by the respective cadres in the surrounding communities will be immediately reported to the village midwife as coordinator of kepanjen Health centre who perform actions to the community concerned. However, for cases that do need quite a lot of medical personnel and is detected as an exceptional occurrence, then the village midwife will immediately coordinate with team fast motion to take immediate action on point-prone society. So that people will get the services that correspond to the minimum standard of health services < 24 hours.

Based on the National Development Planning Agency (2012) quoted from Kusuma, (2014), stated that indicators of health security dividing in three indicators, namely impact, outcomes and output indicators. Based on the above understanding, so researchers have been analyzed each indicator on the achievement of health security. The following is a description of each indicator of health security in *sutera emas* program:

Identification of output on *sutera emas* program implementation:

1. Promoting of public health based on web, which aims to provide health information that can be accessed anytime and anywhere. Thus, medical officers can detect information about emergency case at anytime and improve discipline of medical officers. In addition, it realizes a Clean and Healthy Lifestyle on the community.
2. Improving of case detection rate in the community towards the symptoms of diseases that have been identified in accordance with the cadre training.
3. Detecting of risk factors on the community, so that medical officers will conduct the early case handling to minimize the number of deaths at high risk of disease.
4. Detecting women of reproductive couples at high risk during childbirth so that mother and child survived.
5. Empowering community in the context of sustainable health development. It is caused; health is a basis need of every human being. The fulfillment of health services must involve the various stakeholders like good partnership between local government and community. Health service is not only become responsibilities of the medical officers, but also the community which are empowered to improve the health quality. Thus, cooperation and coordination between community and medical officers could be established in realizing health security

Identification of outcomes on *sutera emas* program implementation consists of:

1. Early detection to prevent the emergency case. In this case the cadre has a significant function as representatives of medical officers at the Kepanjen health centre who will always stand by in monitoring the emergency case. One cadre are placed one neighborhood in each village. It aims to facilitate early monitoring that can be reached by a cadre for each area. In addition, it prevents of the diseases spread in the surrounding area.



2. Facilitate officer in recording and analyzing the data that is gotten from cadre. So, data reports can be reported by medical officers in the web on *sutera emas* program.
3. Facilitate and accelerate in finding the cases in the field. The cases discovery will be detected quickly and precisely targeted so that it minimizes the mortality rate. In addition, it will minimize the spread of diseases in surrounding area. Thus, realization of health security can be achieved in providing a guarantee towards epidemic diseases.
4. Accelerate in handling and referral health service on the type of case (high risk of diseases). It is caused; the patient can be handled quickly, timely, and right targeted to minimize the deaths rate. Thus, the early preparations in handling the referral health service can be done. They are costs, transportation, blood donors, providing infusions, etc.
5. Facilitate in reporting data. The use of technology information in *sutera emas* program is aimed to realize e-government in order to improve the quality and quantity of public services. It provides health services that are effective, efficient, fast, and responsive of the community. Reporting data based on technology information has many functions which are improve quality of health officer's resources to operate web that is using input data, process, and output data. So, they will report the data related in handling diseases in the community.
6. Emergency case information will be received fast moving team (Malang Regency Health Agency and Kepanjen Health Centre) quickly and targeted. It will facilitate medical officers in handling the emergency case. Thus, people that have emergency case can be handled early and quickly. In addition, it is also aimed at the provision of minimum service standards < 24 hours to realize health security.
7. Sources of referral plan information at the high-risk on maternal cases. It aims to minimize the maternal and neonatal mortality. Thus, they will guarantee to survive.
8. Source of information is targeted family planning. The *sutera emas* program is developed to handle others cases, which is family planning in realizing health security. Couples of reproductive age who are the high risk during pregnancy like lung diseases, heart disease, etc. So, this program can prevent and minimize the level of maternal and neonatal mortality in childbirth.
9. The data analysis is done at anytime automatically. The availability of this website, so the data analysis is conducted by medical officers automatically at anytime and anywhere. So, data reports and monitoring of data input to get the requested data output.
10. Operating 24 hours nonstop. It is caused the web application is accessed for 24 hours in using technology information. It can be utilized at anytime and handling of the case on time and on target.
11. Sources of public information to the public health in the region (on progress) via web-based. The provision of this information can become a health referral and guidelines for medical



officers to minimize the emergency cases in order to spread in other areas. So early case handling can be done by medical officers on time and on targeted.

Identification of impact on *sutera emas* program implementation consists of:

1. Improving of public health quality to the community. It is unavoidable, that so far the health problem stills a major concern for the government and society. Many public complaints towards health service include quickly and targeted, simple procedure, easy to access, etc. So that, *sutera emas* program implementation is expected to improve the quality of health services in the smallest scale until the largest scale. Realization of health security is done step by step and sustainable.
2. Improving nutrition for mothers, babies, and toddlers. It has the highest rank in its handling. It is caused, one of the most important and crucial factor in achieving sustainable health development. They are the main actors and main subject in preserving and maintaining offspring.
3. Improving nutritional status of the community. It is caused the nutritional adequacy of society will affect the quality of human resources. Qualified human resources are one of the main components that must be owned by the local and central government in the face of global competition. Global competition demands an acceleration of the changes or innovation. It has a major impact on economic growth of the global community to compete fairly each other.
4. Controlling of infectious diseases and non-infectious diseases will be followed by environmental security. This is because a healthy society will automatically maintain the environment to stay clean and healthy. When people can realize environmental security, so that the quality of health community will be guaranteed. The threats of health guarantee in the community can be caused by environmental conditions are dirty. Thus, bacteria and germs will be easier to attack the public health.
5. Fulfilling, developing, and empowering of health human resources. Medical officers are expected to make innovation program as the efforts in improving the quality of health service. In addition, technology information became one of the tools to access public health information at anytime and everywhere. In addition, realization of e-government implementation can be realized success.
6. Community empowerment and disaster management in health crisis condition. Community empowerment has important role and crucial in the realization of health security. This is because the role of community as primary informant related to the health cases in their surrounding. And then then, they will coordinate with medical officers to handle the cases. Community empowerment will create a sense of awareness to care others, especially on health issues. Early case handling of emergency case can minimize mortality and guarantee to prevent of early epidemic.



7. Improving health care in primary, secondary and tertiary. It is caused, health as a fundamental need for the human survival. The human health that is threatened will be negative impact for us and others. This is because health as the basis and core of the various activities to be carried out by individuals in achieving the desired objectives.

Based on the explanation above, it can be concluded that implementation of innovation health service through *sutera emas* program to realize health security. This is because; early case finding of health can be identified quickly and proper targeted by a cadre. Furthermore, the reporting from *sutera emas* cadre will be detected by medical officers as soon as possible. It will involve fast moving team (Kepanjen health centre and Malang Regency Health Agency) who standby at anytime. It aims to provide health services to the public in accordance with service standards and improve the quality of health services to the community.

## CONCLUSIONS

*Sutera emas* program was a detection system and early warning of epidemic disease and threatened maternal and child mortality. Mechanism of *sutera emas* program is conducted by several proses are: first, *Sutera emas* cadre finds a case (the basis implementers as the first informant in the field); second, Cadre gives the report to the village medical centre (village midwife); third, medical officer do home visit of the patient; fourth, *sutera emas* software will analyze, calculate and give a warning through sending message for criteria case that included in handling & preparation health referral, birth process information to the village midwife, the midwife coordinator & heads of health centre, emergency case information to the team fast motion, and transfer data to the *sijari emas* and *contra war*, and fifth, medical centre take in action in handling the health case in society. Based on the explanation above, reseracher analyze that this innovation program can realize health security. It is caused this program, society can get health service from meical officers especially in Kepanjen Health Centre in early case finding, early case reporting, early case handling, and community empowerment. So that, community will get guarantee a minimum protection from diseases and unhealthy lifestyles through suter emas program implementation. In addition, the reseracher also can anlyze that supporting factor in this program implemenation depend on availability of cadre (first informant), cooperation between stakeholders involved, and availability of infrastructure in supporting the system (software). While, the inhibiting factor in this program implementation which are limited in funding, lack of human resources, not all of society respect in this implementation of program (negative thinking), and low of human resources quality.

## REFERENCES

- [1].Commission on Human Security. (2006). *Human Security Now: Protecting and Empowering People*. New York: Commission on Human Security.



- [2].Dinas Kesehatan Kabupaten Malang, 2012. Sutera Emas (Surveilans Epidemiologi Terpadu Berbasis Masyarakat). Dinas Kesehatan Kabupaten Malang, Malang, Indonesia.
- [3].Dinas Kesehatan Kabupaten Malang, 2015. Surveilans Epidemiologi Terpadu Berbasis Masyarakat (Buku Panduan untuk Kader seri penyakit menular). Dinas Kesehatan Kabupaten Malang, Malang, Indonesia.
- [4].Dinas Kesehatan Kabupaten Malang, 2013. Program Inovatif Sutera Emas (Surveilans Epidemiologi Terpadu Berbasis Masyarakat). Dinas Kesehatan Kabupaten Malang, Malang, Indonesia.
- [5].Kusuma, Bayu M.A., 2014. Decision Making Of The Banyuwangi Public Health Service Assurance Program (*Jpkmb* Program) To Achieve Health Security In Banyuwangi Regency. (Proceeding Journal). *The Second Public Administration Association of Thailand (PAAT) Conference on Asia Governance 2014*.
- [6]. Menteri Kesehatan, 2010. Capaian MDGs Bidang Kesehatan. (Simposium Nasional). JHCC, Jakarta, Indonesia.
- [7].Ningtyas, D.C, dkk. Impelementasi Organisasi Pembelajaran Dalam Pengembangan Penguatan Pengelolaan Keuangan Sektor Publik (Studi tentang Program *The Australia Indonesia Partnership for Decentralization (AIPD)* di Badan Perencanaan Pembangunan Daerah Kabupaten Malang). *Jurnal Administrasi Publik (JAP)*, Vol.2, No. 3 page. 394-399
- [8].Replublica de Colombia. Rio+20: Sustainable Development Goals (SDGs). Ministerio de Relaciones Exteriores, Colombia
- [9].Law on public information disclosure number 14 of 2008
- [10].Law on Epidemic number 4 of 1984
- [11]. Anonymous.(2013). *Sutera Emas dan Sijari Emas, Program Kesehatan Anak dan Ibu Melahirkan di Kabupaten Sidoarjo*. (online).  
Emas<http://igi.fisipol.ugm.ac.id/index.php/id/unfgi/kabar-inovasi/399>. Retrieved on August 27, 2014.
- [12]. Anonymous. 2015. Human Security.  
(online).[https://en.wikipedia.org/wiki/Health\\_Security\\_Express](https://en.wikipedia.org/wiki/Health_Security_Express), Retrieved on August 27, 2014.